

RUBBER GELS AND RUBBER COMPOUNDS
CONTAINING PHENOLIC RESIN ADDUCTS

ABSTRACT OF THE DISCLOSURE

The invention relates to rubber compounds comprising at least one double bond-containing rubber, additions of rubber gels, phenolic resin adducts or phenol/formaldehyde condensation products, such as resols or novolaks, and optionally, further fillers and rubber auxiliary substances, and the vulcanizates and molded rubber articles produced from them. The rubber compounds according to the present invention are characterized in the uncrosslinked state by good processability (compound viscosity $ML_{1+4/100^{\circ}C} < 60$ ME) and in the vulcanized state by Shore-A hardness values $E/23^{\circ}C > 60$, high impact resilience values $E/23^{\circ}C > 60\%$ and a low specific density. The vulcanizates are suitable for the production of industrial rubber articles and for various tire components, such as roll coverings, conveyor belt coverings, belts, spinning cops, seals, golf ball cores, shoe soles and bead compounds, tire carcasses, subread compounds and tire sidewalls. The compounds are particularly suitable for producing reinforced sidewalls for tires with emergency running properties (inserts for run flat tires).